

APTIV-1301.01

Patent

**IN THE CLAIMS:**

This listing of claims replaces all prior versions and listings of claims in the application:

1. (original) A method for obtaining information from a set-top box comprising:  
using a graphical user interface (GUI) on a computer to input a unique identifier for said  
set-top box;  
using said unique identifier to establish a connection across a network between said  
computer and said set-top box;  
querying for one or more internal states of said set-top box; and  
receiving said internal states at said computer, in response.
2. (original) The method of claim 1, wherein said internal states include a  
diagnostic state.
3. (original) The method of claim 1 wherein said network comprises a first and  
second network layer.
4. (original) The method of claim 3 wherein said first network layer is an  
intranet.

APTIV-1301.01

Patent

5. (original) The method of claim 4 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.

6. (original) The method of claim 3 wherein said second network layer is an Internet.

7. (original) The method of claim 3 wherein said second network layer is an intranet.

8. (original) The method of claim 1 wherein said GUI comprises a web page.

9. (original) The method of claim 1 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.

10. (original) The method of claim 1 wherein said step of querying further comprises:

generating a script at said computer;  
sending said script to an application server; and  
executing said script on said application server.

APTIV-1301.01

Patent

11. (original) The method of claim 1 wherein said step of receiving further comprises:
- formatting said internal states into a web page at an application server;
- sending said web page to a web browser on said computer; and
- displaying said web page on said web browser.
12. (original) The method of claim 1 further comprising determining if said set-top box can be maintained or repaired remotely using said internal states.
13. (original) The method of claim 12 further comprising:
- performing a maintenance or a repair activity remotely, if said set-top box can be maintained or repaired remotely; and
- dispatching a service technician, if said set-top box cannot be maintained or repaired remotely.
14. (original) The method of claim 2 wherein said diagnostic state comprises a system summary.
15. (original) The method of claim 2 wherein said diagnostic state comprises an identity.

APTIV-1301.01

Patent

16. (original) The method of claim 2 wherein said diagnostic state comprises feature authorizations.
17. (original) The method of claim 2 wherein said diagnostic state comprises a version.
18. (original) The method of claim 2 wherein said diagnostic state comprises a network configuration.
19. (original) The method of claim 2 wherein said diagnostic state comprises tuning information.
20. (original) The method of claim 2 wherein said diagnostic state comprises RF network information.
21. (original) The method of claim 2 wherein said diagnostic state comprises MPEG information.
22. (original) The method of claim 2 wherein said diagnostic state comprises hardware information.

APTIV-1301.01

Patent

23. (original) The method of claim 2 wherein said diagnostic state comprises memory.
24. (original) The method of claim 2 wherein said diagnostic state comprises system information.
25. (original) The method of claim 2 wherein said diagnostic state comprises channel information.
26. (original) The method of claim 2 wherein said diagnostic state comprises program guide events.
27. (original) The method of claim 2 wherein said diagnostic state comprises broadcast file system information.
28. (original) The method of claim 2 wherein said diagnostic state comprises pay-per-view information.
29. (original) The method of claim 2 wherein said diagnostic state comprises an entitlement management message status.

APTIV-1301.01

Patent

30. (original) The method of claim 2 wherein said diagnostic state comprises passthru messages.
31. (original) The method of claim 2 wherein said diagnostic state comprises last reset state information.
32. (original) The method of claim 1 wherein said step of querying comprises accessing a diagnostic selection area in said GUI.
33. (currently amended) An apparatus comprising:  
a graphical user interface (GUI) on a computer;  
a unique identifier for a set-top box that is input into said GUI and establishes a connection across a network between said computer and said set-top box; and  
one or more internal states of said set-top box that are queried from said computer to said set-top box across said network and received at said computer, in response.
34. (original) The apparatus of claim 33, wherein said internal states include a diagnostic state.
35. (original) The apparatus of claim 33 wherein said network comprises a first and second network layer.

APTIV-1301.01  
Patent

36. (original) The apparatus of claim 35 wherein said first network layer is an intranet.
37. (original) The apparatus of claim 36 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
38. (original) The apparatus of claim 35 wherein said second network layer is an Internet.
39. (original) The apparatus of claim 35 wherein said second network layer is an intranet.
40. (original) The apparatus of claim 34 wherein said GUI comprises a web page.
41. (original) The apparatus of claim 34 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.
42. (currently amended) An apparatus comprising:

APTIV-1301.01  
Patent

a graphical user interface (GUI) on a computer;  
a unique identifier for a set-top box that is input into said GUI and establishes a connection across a network between said computer and said set-top box;  
a script that is generated at said computer and sent to an application server that is interposed between said computer and said set-top box; and  
one or more internal states of said set-top box that are queried when said script is executed on said application server and received at said computer.

43. (original) The apparatus of claim 42 further comprising:

a web page having said internal states that is formatted and sent to said application server;  
and  
a web browser on said computer that receives said web page and displays said web page.

44. (original) A system for obtaining information from a set-top box comprising:

means for using a graphical user interface (GUI) on a computer to input a unique identifier for said set-top box;  
means for using said unique identifier to establish a connection across a network between said computer and said set-top box;  
means for querying for one or more internal states of said set-top box; and  
means for receiving said internal states at said computer, in response.



APTIV-1301.01  
Patent

45. (original) The system of claim 44, wherein said internal states include a diagnostic state.
46. (original) The system of claim 44 wherein said network comprises a first and second network layer.
47. (original) The system of claim 46 wherein said first network layer is an intranet.
48. (original) The system of claim 47 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
49. (original) The system of claim 46 wherein said second network layer is an Internet.
50. (original) The system of claim 46 wherein said second network layer is an intranet.
51. (original) The system of claim 44 wherein said GUI comprises a web page.

APTIV-1301.01  
Patent

52. (original) The system of claim 44 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.

53. (original) The system of claim 44 wherein said means for querying further comprises:

means for generating a script at said computer;  
means for sending said script to an application server; and  
means for executing said script on said application server.

54. (original) The system of claim 44 wherein said means for receiving further comprises:

means for formatting said internal states into a web page at an application server;  
means for sending said web page to a web browser on said computer; and  
means for displaying said web page on said web browser.

55. (original) The system of claim 44 further comprising means for determining if said set-top box can be maintained or repaired remotely using said internal states.

56. (original) The system of claim 55 further comprising:  
means for performing a maintenance or a repair activity remotely, if said set-top box can be maintained or repaired remotely; and

APTIV-1301.01

Patent

means for dispatching a service technician, if said set-top box cannot be maintained or repaired remotely.

57. (original) The system of claim 44 wherein said means for querying is accomplished by means for accessing a diagnostic information selection area in said GUI.

58. (currently amended) A computer program product comprising a computer useable medium having computer readable program code configured to cause a computer to obtain information from a set-top box comprising:

computer readable program code configured to cause a computer to enable a graphical user interface (GUI) which receives a unique identifier for said set-top box;

computer readable program code configured to cause said [[a]] computer to use said unique identifier to establish a connection across a network between said computer and said set-top box;

computer readable program code configured to cause said [[a]] computer to query for one or more internal states of said set-top box; and

computer readable program code configured to cause said [[a]] computer to receive said internal states at said computer, in response.

59. (original) The computer program product of claim 58, wherein said internal states include a diagnostic state.

APTIV-1301.01  
Patent

60. (original) The computer program product of claim 58 wherein said computer network comprises a first and second network layer.

61. (original) The computer program product of claim 60 wherein said first network layer is an intranet.

62. (original) The computer program product of claim 61 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.

63. (original) The computer program product of claim 60 wherein said second network layer is an Internet.

64. (original) The computer program product of claim 60 wherein said second network layer is an intranet.

65. (original) The computer program product of claim 58 wherein said GUI comprises a web page.

APTIV-1301.01  
Patent

66. (original) The computer program product of claim 58 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.

67. (original) The computer program product of claim 58 wherein said computer readable program code configured to cause a computer to query further comprises:

computer readable program code configured to cause a computer to generate a script at said computer;

computer readable program code configured to cause a computer to send said script to an application server; and

computer readable program code configured to cause a computer to execute said script on said application server.

68. (original) The computer program product of claim 58 wherein said computer readable program code configured to cause a computer to receive further comprises:

computer readable program code configured to cause a computer to format said internal states into a web page at an application server;

computer readable program code configured to cause a computer to send said web page to a web browser on said computer; and

computer readable program code configured to cause a computer to display said web page on said web browser.

APTIV-1301.01  
Patent

69. (original) The computer program product of claim 58 further comprising computer readable program code configured to cause a computer to determine if said set-top box can be maintained or repaired remotely using said internal states.